

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A method for moistening a web of paper or paperboard, ~~the method comprising:~~

~~the step of forming a steam atmosphere into in a steam blow cavity open toward the web~~
(1) ~~by way of~~ feeding steam into the cavity [[,]] ; and

~~characterized applying a spray of liquid heated to a temperature higher than the an~~
ambient temperature from at least one nozzle onto the web in the steam atmosphere.

2. (currently amended) The method of claim 1, ~~characterized in that wherein~~ the temperature of the liquid applied as a spray is ~~particularly advantageously in the range of~~ 70 [[-]] to 95°C.

3. (currently amended) The method of claim 1, ~~characterized in that wherein~~ the temperature of the liquid applied as a spray is ~~in the range of~~ 30 [[-]] to 99°C.

4. (currently amended) The method of claim 1, ~~2 or 3, characterized in that wherein~~ the steam and the liquid required for establishing the steam atmosphere are injected from the same nozzle.

5. (currently amended) The method of claim 1, ~~2 or 3, characterized in that wherein~~ the steam and the liquid required for establishing the steam atmosphere are injected from separate nozzles.

6. (currently amended) The method of ~~any one of foregoing claims, characterized in that~~ claim 1, wherein into the cavity open toward the web is formed an atmosphere of saturated steam is formed in the steam cavity.

7. (currently amended) The method of ~~any one of foregoing claims, characterized in that~~ ~~claim 1, wherein~~ the steam is water vapor and the liquid is water.

8. (currently amended) The method of ~~any one of foregoing claims, characterized in that~~ ~~claim 1, wherein~~ the temperature of the liquid being applied as a spray is controlled in ~~the a~~ cross-machine (CD) direction.

9. (currently amended) The method of ~~any one of foregoing claims, characterized in that~~ ~~the claim 1, wherein~~ an amount of the liquid being applied as a spray is controlled in ~~the a~~ cross-machine (CD) direction.

10. (currently amended) The method of ~~any one of foregoing claims 8-9, characterized in that~~ ~~claim 8, wherein~~ the temperature or ~~a~~ flow rate of the liquid being applied as a spray is adjusted in ~~the a~~ cross-machine (CD) direction with ~~the help of~~ a control system and ~~that~~ takes measurements ~~performed on~~ ~~of~~ the web.

11. (currently amended) An assembly apparatus for moistening a web of paper or paperboard, ~~the assembly~~ comprising:

a steam blow cavity adapted to ~~that is~~ open toward a moving web (1) ;
and at least one nozzle (5, 6, 7) for feeding at least steam into the steam blow cavity so as to form a steam atmosphere, ~~characterized by~~ ; and

at least one nozzle (5, 6, 7) for applying a spray of a liquid heated to a temperature higher than ~~the an~~ ambient temperature onto the web (1) in the steam atmosphere.

12. (currently amended) The assembly apparatus of claim 11, ~~characterized in that that~~ ~~wherein~~ at least one of the nozzles is a dual-channel nozzle (FIG. 4) capable of injecting both steam and liquid.

13. (currently amended) The assembly apparatus of claim 11, ~~characterized by the use of wherein~~ separate nozzles are used for injecting the steam and the liquid.

14. (currently amended) The assembly apparatus of ~~any one of claims 11-13, characterized by claim 11, further comprising a~~ means adapted to the nozzles for heating the steam or liquid injected ejected therefrom and for controlling the temperature of the injected steam or liquid ejected therefrom.

15. (currently amended) The assembly apparatus of ~~any one of claims 11-14, characterized in that claim 11, wherein~~ the assembly apparatus is located ~~on the in a~~ dryer section, calender section or therebetween of a paper/paperboard manufacturing line.

16. (new) The method of claim 2, wherein the steam and the liquid required for establishing the steam atmosphere are injected from the same nozzle.

17. (new) The method of claim 3, wherein the steam and the liquid required for establishing the steam atmosphere are injected from the same nozzle.

18. (new) The method of claim 2, wherein the steam and the liquid required for establishing the steam atmosphere are injected from separate nozzles.

19. (new) The method of claim 3, wherein the steam and the liquid required for establishing the steam atmosphere are injected from separate nozzles.

20. (new) The method of claim 2, wherein an atmosphere of saturated steam is formed in the steam cavity.

21. (new) The method of claim 3, wherein an atmosphere of saturated steam is formed in the steam cavity.

22. (new) The method of claim 4, wherein an atmosphere of saturated steam is formed in the steam cavity.

23. (new) The method of claim 5, wherein an atmosphere of saturated steam is formed in the steam cavity.

24. (new) The method of claim 2, wherein the steam is water vapor and the liquid is water.

25. (new) The method of claim 3, wherein the steam is water vapor and the liquid is water.

26. (new) The method of claim 4, wherein the steam is water vapor and the liquid is water.

27. (new) The method of claim 5, wherein the steam is water vapor and the liquid is water.

28. (new) The method of claim 6, wherein the steam is water vapor and the liquid is water.

29. (new) The method of claim 9, wherein the temperature or a flow rate of the liquid being applied as a spray is adjusted in a cross-machine direction with a control system that takes measurements of the web.

30. (new) The apparatus of claim 12, further comprising a means adapted to the nozzles for heating the steam or liquid ejected therefrom and for controlling the temperature of the steam or liquid ejected therefrom.

31. (new) The apparatus of claim 13, further comprising a means adapted to the nozzles for heating the steam or liquid ejected therefrom and for controlling the temperature of the steam or liquid ejected therefrom.

32. (new) The apparatus of claim 12, wherein the apparatus is located in a dryer section, calender section or therebetween of a paper/paperboard manufacturing line.

33. (new) The apparatus of claim 13, wherein the apparatus is located in a dryer section, calender section or therebetween of a paper/paperboard manufacturing line.

34. (new) The apparatus of claim 14, wherein the apparatus is located in a dryer section, calender section or therebetween of a paper/paperboard manufacturing line.